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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,469	02/14/2006	Hirohisa Kusuda	VPM-00201	2310

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EXAMINER	
HUYNH, NAM TRUNG	
ART UNIT	PAPER NUMBER
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/568,469	KUSUDA ET AL.	
	Examiner	Art Unit	
	NAM HUYNH	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 September 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) *18-25* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This office action is in response to amendment filed on 9/2/08. Of the previously presented claims 1-10; claims 1-10 have been amended, claims 11-25 have been added.

Election/Restrictions

1. Newly submitted claims 18-25 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The claims present a sensor device that detects the movement of the mobile communication terminal and a mobile communication system comprising a mobile communication terminal, the aforementioned sensor device, and means for interfacing the mobile communication terminal with the sensor device. The limitations recited in the claims have separate utility and differ from the originally presented invention.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 18-25 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-4, 7, 8, 10, 11, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lenander et al. (EP 1139640) (hereinafter Lenander) in view of Masuyama et al. (US 2004/0029640) (hereinafter Masuyama).

Regarding claim 1, Lenander teaches an external apparatus (game board) for mobile communication terminal comprising (paragraph 16; figure 2a, item):

data transmission means (communication port) for transmitting detection result data acquired based on detection results (inputs from the game board) by said detection means to said mobile communication terminal by wired or wireless non-public short-range communication (paragraphs 17, 18, and 34).

However, Lenander does not explicitly teach detection means for detecting at least one of position, direction, attitude and movement of said external apparatus along at least one axis of a coordinate system. Masuyama discloses a game system and game information storage used for the same. Masuyama teaches the use of an external apparatus (cartridge) that detects at least one of position, direction, attitude and movement of the external apparatus along at least one axis of a coordinate system (paragraph 99; the detection of tilt, movement, and impact is performed by the XY-axis acceleration sensor and Z contact switch). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the game board of Lenander to additionally include the capability to detect movement as controller inputs for a game, as taught by Masuyama, enhance the experience and interest of the game since movements are used as opposed to conventional buttons or a joystick.

Regarding claim 2, Masuyama teaches said detection means includes angle detection means for detecting an angle against the standard angle around a virtual axis leading to a predetermined direction (paragraph 110).

Regarding claim 3, Masuyama teaches said detection means includes acceleration detection means for detecting acceleration in a predetermined direction working on said external apparatus (paragraph 99).

Regarding claim 4, Lenander teaches the external apparatus further comprises key operation means having keys used by users, wherein said data transmission means transmits key operation signals from said key operation means and said detection result

data to the mobile communication terminal by non-public communication using flexible communication cable or wireless non-public communication (paragraph 18; figure 2a).

Regarding claim 7, the combination of Lenander and Masuyama teaches a mobile communication terminal comprising:

application program execution means (processor) for executing an application program (computer game in the mobile telephone) with detection result data acquired based on detection results by detection means for detecting at least one of position, direction, attitude and movement, in a main body of said mobile communication terminal (Lenander; paragraphs 14, 19)

an external apparatus for mobile communication terminal wherein the external apparatus includes:

the detection means for detecting the at least one of position, direction, attitude and movement of said external apparatus along at least one axis of a coordinate system; and

data transmission means for transmitting detection result data acquired based on detection results by said detection means to said mobile communication terminal by wired or wireless non-public short-range communication (see above with respect to claim 1); and

data reception means (communication port of the mobile telephone) for receiving detection result data transmitted from said external apparatus for mobile communication terminal by wired or wireless non-public short-range communication, in the main body of said mobile communication terminal (Lenander; paragraph 16);

wherein said application program execution means executes said application program with detection result data received by said data reception means (in the combination of Lenander and Masayuma a player plays a computer game on a mobile phone using the modified game board of Lenander with the movement detection means of Masayuma).

Regarding claim 8, the Lenander teaches said external apparatus for mobile communication terminal includes key operation means having keys used by users, wherein said data transmission means transmits key operation signals from said key operation means and said detection result data to the mobile communication terminal by non-public communication using flexible communication cable or wireless non-public communication (paragraphs 17, 18, 20, and 34), and

wherein said application program execution means uses detection result data and key operation signals received by said data reception means and executes a game application program that proceeds in accordance with said detection result data and said key operation signals (paragraphs 19 and 21).

Regarding claim 10, the combination of Lenander and Masuyama teaches an external display system for mobile communication terminal comprising:

a mobile communication terminal (Lenander; paragraphs 14, 16);

an external display device for displaying images based on image signals output from said mobile communication terminals (Lenander; paragraphs 14, 16, figure 1; display for mobile telephone); and

image output means for outputting image signals for displaying screen images corresponding to contents of an application program executed by an application program execution means, to said external display device (paragraph 16; the computer game is displayed on the display of the mobile telephone),

wherein the mobile communication terminal includes:

the application program execution means for executing the application program with detection result data acquired based on detection results by detection means for detecting at least one of position, direction, attitude and movement, in a main body of said mobile communication terminal;

an external apparatus for mobile communication terminal, wherein the external apparatus includes:

the detection means for detecting at least one of position, direction, attitude and movement of said external apparatus along at least one axis of a coordinate system; and

data transmission means for transmitting detection result data acquired based on detection results by said detection means to said mobile communication terminal by wired or wireless non-public short-range communication; and

data reception means for receiving detection result data transmitted from said external apparatus for mobile communication terminal by wired or wireless non-public short-range communication, in the main body of said mobile communication terminal;

wherein said application program execution means executes said application program

with detection result data received by said data reception means (see above with respect to claim 7).

Regarding claim 11, Lenander teaches said external apparatus for mobile communication terminal includes key operation means having keys used by users, wherein said data transmission means transmits key operation signals from said key operation means and said detection result data to the mobile communication terminal by non-public communication using flexible communication cable or wireless non-public communication, and wherein said application program execution means uses detection result data and key operation signals received by said data reception means and executes a game application program that proceeds in accordance with said detection result data and said key operation signals (paragraphs 17, 18, 20, and 34).

Regarding claims 15-17, Masuyama teaches the detection means includes at least one of: an acceleration sensor and a geomagnetic sensor (paragraph 99).

5. Claims 5, 6, 9, and 12-14 are are rejected under 35 U.S.C. 103(a) as being unpatentable over Lenander et al. (EP 1139640) (hereinafter Lenander) in view of Masuyama et al. (US 2004/0029640) (hereinafter Masuyuma) as applied to claims 1, 7, and 10 above, and further in view of Moran et al. (US 2004/0157638) (hereinafter Moran).

Regarding claims 5, 9, and 12, the combination of Lenander and Masayuma teaches the limitations set forth in claim 1, but does not explicitly teach that the external apparatus is configured to be freely attached to and removed from a memory card slot

provided in said mobile communication terminal. Moran teaches an external host system connected to a cellular telephone via a USB connection with the host system and a flash memory system of the cellular telephone (figure 1, item 110). Therefore it would have been obvious to one of ordinary skill in the art to modify the combination of Lenander and Masuyama to interface the game controller with the mobile telephone via a memory card slot, as taught by Moran, in order for the processor of the mobile telephone to execute the commands or instructions received from the controller. Moran teaches that the flash memory system is accessed for reading and/or writing from the host (page 5, paragraph 112).

Regarding claims 6, 13, and 14, Moran teaches that the cellular telephone is configured to be completely received in said memory card slot when said external apparatus is attached to the said memory card slot (figure 1).

Response to Arguments

6. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NAM HUYNH whose telephone number is (571)272-5970. The examiner can normally be reached on 8 a.m.-5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

NTH
1/30/08